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COMPACT BIDIRECTIONAL AUTOSWITCHES
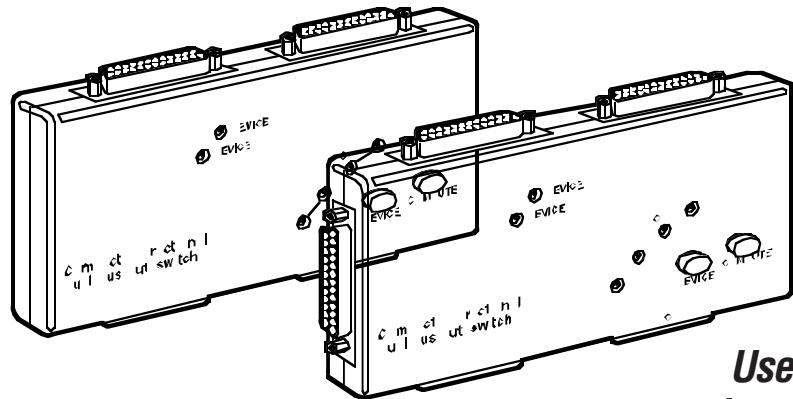
Use these sharers with laser printers or other devices requiring a bidirectional IEEE 1284 interface.

Key Features

▶ *Fully compatible with IEEE 1284, ECP/EPP, Centronics® , byte, and nibble modes.*

▶ *Data transfer rate of up to 2 MBps.*

▶ *Provides PC to PC high-speed data transfer via the parallel port.*

▶ *Built-in microprocessor provides real-time communication.*

▶ *Operates in auto-link or manual mode.*

▶ *Just plug and play! Includes software.*

Many of today's printers use the bidirectional IEEE 1284 interface which enables the printer to communicate with your PC.

Bidirectional Autoswitches are fully IEEE 1284 compatible and enable you to share printers, scanners, Zip drives, CD-ROM drives, digital cameras, and more. You can even use the switches for PC-to-PC high-speed data transfer via the parallel port.

All three models support speeds up to 2 MB per second and are fully compatible with the IEEE-1284 standard as well as ECP/EPP, Centronics, Byte, and nibble modes. A built-in microprocessor provides real-time communication between devices.

The switches automatically sense BiTronics or Centronics printers. And they work with DeskJet® printers without

disabling the bidirectional communications.

You can set the time out period between print jobs from 5 seconds up to 40 seconds.

Bidirectional Autoswitches install easily—just plug and play. Easy-to-read LEDs indicate which channel is in use.

The Reversible Bidirectional AutoSwitch connects two computers to one IEEE-1284 BiTronics printer or other parallel device. Or use two parallel devices with one computer.

Supports Windows® 95 direct cable connection.

Bidirectional Dual Bus AutoSwitches connect two or four computers to two IEEE-1284 BiTronics printers or other parallel devices.

Dual-bus architecture features two independent channels for simultaneous access to parallel devices and file transfer.

Supports Windows 3.1, 95, 98, and Windows NT®.

Typical Application

Reduce printer costs and increase user options by having four PCs share two laser printers.

Specifications

Maximum Distance — 5 m

Maximum Transfer Rate — 2 MB per second

Connectors — (3), (4), or (6) DB25 F

Indicators — LEDs: SW177A: None; SW178A: (2) channel in use; SW179A: (4) channel in use

Operating Temperature — 5 to 40°C

Power — Interface-powered or optional power supply

Size —
SW177A: 2.5 x 8.1 x 9.1 cm;
SW178A: 2.5 x 17.8 x 9.1 cm;
SW179A: 2.5 x 19.1 x 9.1 cm

Weight — SW177A:0.1 kg; SW178A: 0.2 kg; SW179A: 0.2 kg

Technically Speaking

The 1284 standard is an IEEE standard called "Signalling Method for a Bidirectional Parallel Peripheral Interface for Personal Computers" used for bidirectional parallel-printer-bus support.

While standard parallel interfaces can support speeds of up to 150 kbps at distances of up to 1.8 m, IEEE 1284 parallel interfaces can send your data over six times faster and more than five times the distance.

The standard specifies:

• All signals are twisted with a signal line twisted to its ground return.

• Each signal and ground return must have a characteristic impedance of 62±6 ohms over the frequency band of 4 to 16 MHz.

• The wire-to-wire crosstalk shall be no greater than 10%.

• The cable will have shielding with a minimum of 85% optical braid coverage over foil.

• The cable shield shall be connected to the connector back shell using a 360° concentric method. A pigtail connection is not acceptable.

• Compliant cable assemblies shall be marked: "IEEE Std 1284-1994 Compliant."

The standard defines two interface levels and specifies a physical and electrical interface.

The Level I Interface is for devices that need reverse-mode capabilities but do not operate at high speeds. The Level II interface is for both bidirectional and high-speed communications.

The 1284 standard also defines connectors for use in the parallel interface. The 25-pin DB25 connector is defined as the Type "A" connector. The Telco 36, 36-conductor, 0.085" centerline Champ connector with bale locks is defined as the Type "B" connector. The Type "C" connector is a 36-contact, 0.050" centerline mini connector with clip latches.